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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,510

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Minoru Uematsu

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EXAMINER

CHENG, JACQUELINE

ART UNIT

PAPER NUMBER

3768

NOTIFICATION DATE

DELIVERY MODE

03/28/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/614,510	Applicant(s) UEMATSU, MINORU	
	Examiner JACQUELINE CHENG	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9,10,18,19 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9,10,18,19 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/7/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed January 25, 2005 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered. No list of information to be considered with a column that provides a blank space next to each document to be considered was submitted with the IDS statement.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

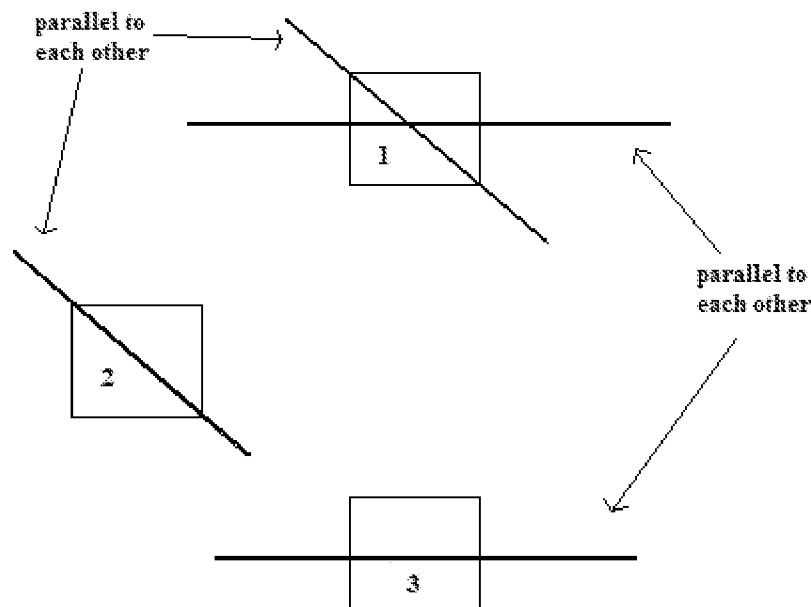
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 9, 10, and 25-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nambu (US 5,615,430) in view of Tomura (JP 2004-49819) further in view of Oota (US

6,508,586 B2). Nambu teaches a medical bed system which allows a plurality of medical apparatus, such as a CT scanner, a linear accelerator (irradiation apparatus), and an x-ray simulator to use a single bed (col. 7 line 36-64). This is beneficial so that as the patient goes from the imaging system such as a CT apparatus, which is used to determine the portion of the patient that needs to be irradiated, to the actual irradiation apparatus, which irradiates the patient at the determined location, the patient does not have to be bothered and does not have to get up to move from bed to bed (abstract, col. 1 line 29-42). The system of Nambu includes a control system which is capable of moving the bed in a curved movement (fig. 9) as well as rotating on a turntable mount on the floor face (fig. 1), which is an isocentric rotation mechanism. The turntable mount moves along a rail. Although Nambu does not explicitly state that the bed is moved in a linear fashion on rails, it would be obvious to one skilled in the art to try to move the bed in the easiest way depending on the configurations of the medical apparatuses. This is something that is well known in the art as disclosed by Tomura. Tomura discloses a combined system with a CT and nuclear medicine device with a bed which is linearly movably arranged (abstract, fig. 1, element 11, a). Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to change the circular rail of Nambu (fig. 1 element 19) to a linear rail. Once the bed of Nambu is moved to a medical apparatus such as from the CT apparatus (fig. 11 element 3) to the irradiation apparatus (fig. 11 element 1), or from the irradiation apparatus to the x-ray simulator (fig. 11 element 2) (all of which are each disposed in parallel to each other, see image below), the bed is connected by a hook mechanism to the medical apparatus and control of the bed is then handed over to the particular medical apparatus. Depending on the medical apparatus, the tabletop may be vertically movable as well as back and forth movable in

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the direction of a body axis of the patient (such as back and forth movement in the longitudinal direction and back and forth movement in the lateral direction). Different configurations of the tabletop can be seen in figs. 12a, 12b, and 12c (col. 4 line 15-18, col. 4 line 48-60, col. 6 line 16-30).



4. The system of Nambu also does not include movement of the medical apparatuses.

However to move the medical apparatuses along with moving a common bed is well known in the art as disclosed by Oota. Oota discloses a system also including multiple medical apparatuses such as a CT apparatus and an irradiation apparatus, and a common moveable bed to use with the apparatuses. The medical apparatuses are moveable on rails on both the floor and the ceiling (fig. 1), and have a variety of movements which cross each other, as seen in the movements along axes A and H, move in the same direction, as seen in the movements along axis A and I, and curvedly moving, as seen in the movements along axes B and E. In addition, the direction of the

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movement of the bed crosses the direction of movement of both systems as it moves along axis C, which is perpendicular to axes A and I. It would be obvious to one of ordinary skill in the art at the time of the invention to modify the system disclosed by Nambu with the teachings of Oota in order to further the utility of the combined system disclosed by Nambu to include additional linear movements proving for a system which advantageously allows flexibility in the set up of the system, allowing further ability to align the bed and system properly, and allows for the inclusion of any number of imaging and treatment systems to be combined and used together.

5. **Claims 18 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nambu in view of Tomura in view of Oota as applied to claim 1 above, and further in view of Shepherd (US 5,537,452). Nambu in view of Tomura in view of Oota, as discussed above, substantially discloses the invention as claimed, however fails to explicitly disclose a CT system with a diameter of a size to receive a common bed that is moved laterally within the bore. Shepherd also discloses a system for determining accurate positioning using a CT scanner including treatment with a radiation therapy system and additionally teaches that positioning adjustment means are included to allow the common bed to be moved from one system to another including centering the table laterally in the CT unit opening including adjustment to allow the table to be in the appropriate position for imaging (col. 5 line 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosures of Nambu, Tomura, and Oota in light of the teachings in the reference by Shepherd, as Shepherd states including such positioning means allows for improved localization of radiation dose and targeting (col. 2 line 1-12).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,984,827 B2 which is the US patent equivalent to of JP 2004-49819.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACQUELINE CHENG whose telephone number is (571)272-5596. The examiner can normally be reached on M-F 10:00-6:30.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art Unit
3737

/Jacqueline Cheng/
Examiner, Art Unit 3768